

### **Remarks**

Claims 24-25, 33-35 and 40-53 are pending. Claim 24, 43 and 45 have been amended in response to the Examiner's rejections and new claims 52 and 53 added. The claim amendments find support, for example, in Tables 1A and 1B of the specification.

### **Rejections under 35 U.S.C. §112, second paragraph**

Applicants were pleased to note that the Examiner found the previous amendments and arguments as to the indefiniteness of the claims, as well as the written description in the specification were largely persuasive.

Applicants note that the Examiner has searched several sequences in addition to Seq ID 20614 stated that these are free of the art. Based on the Examiner's statements on page 13 of the office action, the claims have been amended to specifically recite the sequence listed by the Examiner as having been searched.

The Examiner has maintained the rejection of claims 24-25 and 33-51 under 35 U.S.C. §112 as failing to comply with the written description requirement. The Examiner contends that while the claims were limited to overcome the previous rejection as to breadth, the limitation that the region be within 500,000 nucleotides of the specified SNP renders the claims overly broad. The Examiner specifically contends that the specification does not provide a map to identify how the sequences relate to each other and that a more detailed description of each SNP, including its location in the bovine genome, is required. Although Applicants disagree, and note that disequilibrium analyses are detailed in the specification, in the interest of promoting prosecution the claims have been limited to the sequences identified by the Examiner. Applicants believe these amendments overcome the Examiner's rejection as to written description.

The Examiner has maintained the rejection of claims 24-25 and 33-51 under 35 U.S.C. §112, first paragraph as lacking enablement. The Examiner asserts that the art included negative teachings as to the unpredictability of gene association studies, and that the specification lacks guidance to overcome this unpredictability. Again, Applicants disagree and point the Examiner to pages 60-66 of the specification, detailing bovine SNPs associated with certain traits and the determination of linkage disequilibrium in these animals. However, in the interest of promoting

prosecution, the claims have been limited to the sequences identified by the Examiner.  
Applicants believe this amendment addresses the Examiner's rejection.

The Examiner has newly rejected claims 24-25, 33-35 and 40-51 under 35 U.S.C. §112, second paragraph, as indefinite for recitation of the limitations that a SNP be "in a region less than about 500,000 nucleotides" from the recited sequence. The claims have been amended to remove this limitation. Applicants believe this amendment addresses the Examiner's rejection.

The Examiner has further newly rejected claim 35 under 35 U.S.C. §112, first paragraph, as lacking written description for the occurrence of a SNP associated with a bovine subject having a value for tenderness that is within at least a 99th percentile of the bovine population. Claim 53 has been amended to recite that the nucleotide occurrence is within 90<sup>th</sup> percentile of the bovine population. Applicants note that the Examiner has stated that this is supported by the specification, therefore believe this amendment addresses the Examiner's rejection.

If the Examiner believes there are other issues that may be resolved by telephone interview, or that there are any informalities remaining in the application that may be corrected by Examiner's Amendment, a telephone call to the undersigned is respectfully solicited.

No additional fees are believed due, however the Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment of fees to Deposit Account number 11-0980.

Respectfully submitted,

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